SATETY WARNING

SKYLARK OSD is for entertainment purpose only, users should bear all the risks involved when using this electronics device.

SUMMARY

1. Simple to use, equip with video input/output and power supply voltage only.
2. The functionalities provided including graphical, altitudinal, speed, return-arrow prompts, radar and low-voltage alert.

PACKING LIST

1.	Tiny OSD board	1 pc
2.	100A Current sensor	1 pc
3.	4 Hz GPS board	1 pc
4.	GPS cable	1 pc
5.	Current sensor cable	1 pc
6.	User manual	1 pc
7.	Reserve wire	several pcs

MAIN CONNECTION

1. Please follow the guide and install the system step-by-step, otherwise it may cause non-recoverable problems.
2. Main connection (the interfaces on PCB are labeled with corresponding port numbers.)

Front side:

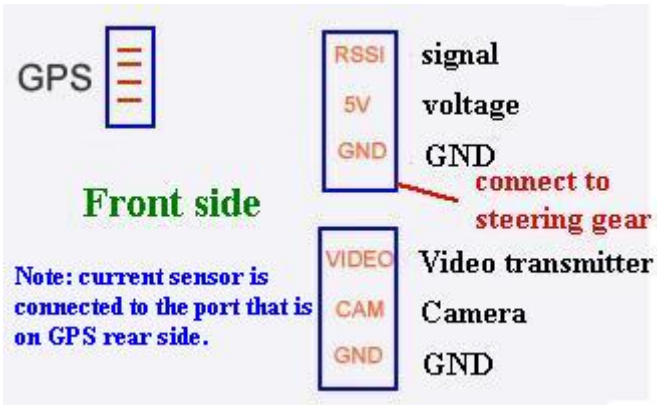
GPS port: connect with GPS

Steering gear port: connect with steering gear and supply the power to OSD main board.

VO: the video transmitter signal connects with the camera

VI: connect with the camera signal

Rear side: connect with current sensor.



OPERATION PROCEDURES

1. Follow the descriptions on the interface, connect all the wires. To ensure users' safety, please check the wires again after connection, then connect to the power.
2. After connecting to power, if "GPS is NOT Detected" is displayed and flashes, it means there is no GPS module or it is not well connected. Re-connect the GPS and connect to the power again. **Note: if there is flashing massage, check the corresponding port is well connected and battery voltage is normal. Then connect to the power again.**

INDICATIONS OF THE LED LIGHT

- **RED (Power)**
  Indicates power supply, please check if the system is correctly connected when the light is off.

DISPLAY EXPLANATION

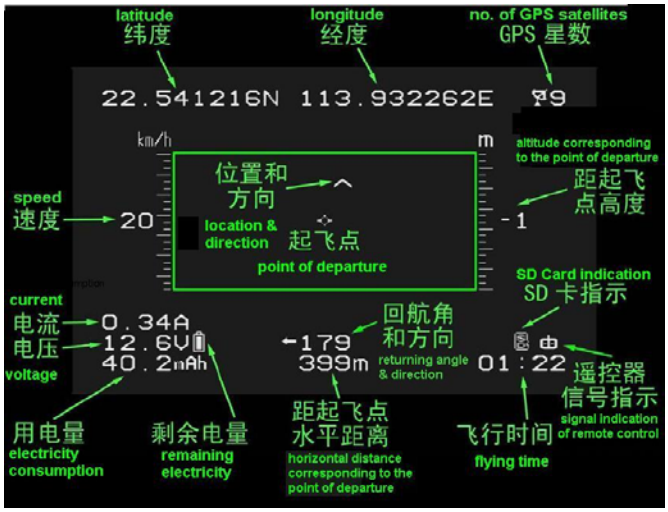
As shown in the following diagram. The rectangle in the center is the display range of the plane icon.

As a warning, many of the displayed information would flash.

When the GPS signal is not strong enough, *latitude, longitude, numbers of GPS satellites, speed, altitude,* the plane icon, *returning angle & direction, horizontal distance corresponding to the point of departure* would be flashing. When the signal becomes fine, flashing would stop automatically.

When user enters this mode the first time after charging, if positioning of the GPS has not yet been completed, *latitude* and *longitude* would not be shown. The display area would appear the flashing words of "*GPS Searching Data*", which means the GPS is still searching for the satellites. To guarantee the navigation information is accurate, please wait until the *latitude* and *longitude* data are displayed before takeoff.

If the device is under interference, *signal indication of remote control* would flash for certain seconds, so as to warn the user that it is out of the control range.



DISPLAYED INFORMATION DESCRIPTION

	Description	Display Range
Latitude	N is North Latitude, S is South Latitude, Unit is Degree	90.0N~0~90.0S
Longitude	E is East Longitude, W is West Longitude, Unit is Degree	180.0E~0~180.0W
Numbers of GPS satellites	Numbers of GPS satellite that can be received signal currently.	0~9; 9 would be displayed even more than 9
Speed	Total speed, unit is Km/ hour	0~999km/h
Current	Operation current, unit is A	0.0~99.9A
Voltage	System voltage, unit is V. it would flash when under voltage.	0.0~99.9V
Electricity consumption	The electricity consumed from system start-up till now, unit is mAH	0.0~9999mAH
Remaining electricity	The battery symbol indicates the remaining electricity level, when it is nearly used up, the symbol would flash.	It takes a 2200mAH battery as indication standard.
Point of departure	Indicate the point of departure	
Location & direction	The plane icon indicates the existing location & direction corresponding to the point of departure. *Up*: North, *Down*: South, *Left*: West, *Right*: East. The flying direction is shown by the plane icon.	
Altitude corresponding to the point of departure	Altitude that corresponding to the point of departure. The figure can be negative, unit is meter.	-9999~9999m
Returning angle & direction	Indicate the required angle and direction for a returning journey, the unit for angle is degree. When angle is less than 5 degree, it would consider as accurate, so direction would not be displayed.	
Horizontal distance corresponding to the point of departure	The horizontal distance corresponding to the point of departure, the unit would be adjusted automatically.	0~99.9km
Signal indication of remote control	When the device is under interference and out of control range, it would flash.	
Flying time	The flying time is accumulated from the first take-off. When there are 4 or more GPS satellites and the speed exceeds 5m/s the first time, it starts counting.	